

PTO/SB/21 (10-07)

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/820,328
Filing Date	April 7, 2007
First Named Inventor	John Santhoff
Art Unit	2611
Examiner Name	Curtis B Odom
Attorney Docket Number	00125

**ENCLOSURES (Check all that apply)**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/<br>Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts<br>under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a<br>Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br>Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><br><input type="checkbox"/> Appeal Communication to Board<br>of Appeals and Interferences<br><br><input type="checkbox"/> Appeal Communication to TC<br>(Appeal Notice, Brief, Reply Brief)<br><br><input type="checkbox"/> Proprietary Information<br><br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify<br>below):<br>Return Receipt Postcard<br>Petition to Withdraw Holding of Abandonment |
|--|--|--|

Remarks

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	Pulse-LINK, Inc.		
Signature			
Printed name	Peter R. Martinez		
Date	December 5, 2007	Reg. No.	42,845

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Peter R. Martinez	Date	December 5, 2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Docket No.: 00125

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit:	2611
	)		
John SANTHOFF	)	Examiner:	Curtis B Odom
	)		
Serial No.: 10/820,328	)	Confirmation No.:	8509
	)		
Filed: April 7, 2004	)		
	)		
For: Ultra-Wideband	)		
Communication Through a Wire	)		
Network	)		

Carlsbad, California  
December 5, 2007

MAIL STOP PETITION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PETITION UNDER 37 C.F.R. § 1.181 TO  
WITHDRAW HOLDING OF ABANDONMENT**

Dear Sir:

Applicant hereby submits this Petition to withdraw a holding of abandonment in accordance with the provisions of 37 C.F.R. § 1.181. Applicant notes that the deadline for filing this Petition is December 27, 2007.

## REMARKS

On November 27, 2007, a Notice of Abandonment in the above-identified patent application was mailed by the USPTO under the grounds that no reply was received in response to an Office Action mailed May 18, 2007.

Applicant submits that the Notice of Abandonment was issued in error, as a response to the outstanding Office Action was timely submitted.

Attached as **Exhibit A** is a photocopy of Applicant's postcard that bears a USPTO date-stamp of November 26, 2007. The postcard indicates that on November 16, 2007 the following documents were mailed First Class to the USPTO: a Transmittal form (SB/21); an 9 page Response/Amendment; a Petition for a 3-month extension of time; a check for \$590; and a Certificate of Mailing (included on the SB/21). All of these documents are attached in **Exhibit B**.

The transmittal (SB/21) includes a certificate of mailing that certifies the Response to Office Action, as well as the 3-month Petition and check were mailed on November 16, 2007, which is within the six-month statutory deadline for responding to the May 18, 2007, Office Action.

Therefore, the Notice of Abandonment was issued in error and Applicant requests that the holding of abandonment be withdrawn and that the Response to Office Action be examined on its merits.

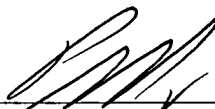
**Conclusion**

Applicant believes that this Petition places the application in condition for continued examination. No fee is believed due with this Petition. Should any issues remain unresolved, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

December 5, 2007

Date



Peter R. Martinez  
Attorney for Applicant(s)  
Reg. No. 42,845

# Transaction List

Search by

☐ Accounting Date:  Operator ID:   
(MMDDYY)

Accounting Date

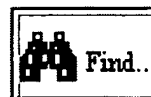
Starts:

Ends:

☒ Name/Number:

☐ Attny Docket No:

☐ Deposit Account No.:



Accounting Date	Operator ID	Seq. No.	Txn Src	Fee Code	St	Amount	Name/Number
11/26/2007	HMARZ11	243	SALE	2814	A	65.00	10820328
11/26/2007	HMARZ11	242	SALE	2253	A	525.00	10820328
03/31/2005	RAMPTAS	378	SALE	8021	A	40.00	10820328
03/31/2005	RAMPTAS	370	SALE	8021	A	40.00	10820328
06/16/2004	RAMPTAS	597	SALE	8021	A	40.00	10820328
04/12/2004	EFLORES	137	SALE	2202	A	81.00	10820328
04/12/2004	EFLORES	136	SALE	2001	A	385.00	10820328



Adjustment Detail

Authorization Detail



## **EXHIBIT A**

S.N.: 10/820,328

FILED: 04/07/2004

DOCKET No.: 00125

MAILED: 11/16/2007

TITLE: ULTRA-WIDEBAND COMMUNICATION THROUGH A WIRED NETWORK

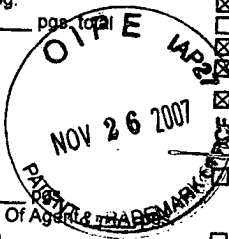
CONFIRMATION NO.: 8509

APPLICANT: SANTHOFF

ATTORNEY: P. Martinez

The following was received in the U.S. Patent & Trademark Office on the date stamped hereon:

- |   |  |
|---|--|
| <input type="checkbox"/> Utility Patent Application Transmittal _____ pg.                       | <input type="checkbox"/> Recordation Form Cover Sheet _____ pg.                            |
| <input type="checkbox"/> Provisional Application For Patent Cover Sheet _____ pg.               | <input type="checkbox"/> Assignment _____ pgs.   |
| <input type="checkbox"/> Dep. Acc. Auth. <input type="checkbox"/> in duplicate _____ pgs. total | <input type="checkbox"/> Preliminary Amendment _____ pgs.                                  |
| <input type="checkbox"/> Fee Transmittal (PTO/SB/17) _____ pg.                                  | <input checked="" type="checkbox"/> Transmittal Form (PTO/SB/21) <u>1</u> pg.              |
| <input type="checkbox"/> Dep. Acc. Auth. <input type="checkbox"/> in duplicate _____ pgs. total | <input type="checkbox"/> Transmittal Form (PTO-1382) _____ pgs.                            |
| <input type="checkbox"/> Specification Cover Sheet _____ pg.                                    | <input checked="" type="checkbox"/> Response/ Amendment <u>9</u> pgs.                      |
| <input type="checkbox"/> Specification, including:  | <input checked="" type="checkbox"/> Terminal Disclaimer <u>1</u> pgs.                      |
| Written Description _____ pgs.  | <input checked="" type="checkbox"/> Petition for <u>3</u> Mth. Ext. of Time <u>1</u> pgs.  |
| Claims on _____ pgs.  | <input type="checkbox"/> Dep. Acc. Auth.   |
| Abstract _____ pg.  | <input checked="" type="checkbox"/> In duplicate <u>2</u> pgs. Total                       |
| Total _____ pgs.  | <input checked="" type="checkbox"/> RCE Transmittal _____ pg.                              |
| <input type="checkbox"/> Drawings _____ sheets <input type="checkbox"/> Formal                  | <input type="checkbox"/> Dep. Acc. Auth.   |
| <input type="checkbox"/> PCT Request (Form PCT/RO/101) _____                                    | <input type="checkbox"/> In duplicate _____ pgs. Total                                     |
| <input type="checkbox"/> Combined Dec. & Power of Atty/ Auth. Of Agent <u>1</u> pg.             | <input type="checkbox"/> Part B-Issue Fee Transmittal _____ pg.                            |
| <input type="checkbox"/> Power of Attorney (PTO/SB/81) (1 pg.)                                  | <input type="checkbox"/> Dep. Acc. Auth.   |
| <input type="checkbox"/> Information Disclosure Statement _____ pgs.                            | <input type="checkbox"/> In duplicate _____ pgs. Total                                     |
| <input type="checkbox"/> Form SB/08A and B _____ pgs. In duplicate pgs. total                   | <input checked="" type="checkbox"/> Fee(s) Enclosed <u>\$590.00</u> (Check # <u>1709</u> ) |
| <input type="checkbox"/> Copies of _____ cited references                                       | <input checked="" type="checkbox"/> Certificate of Mailing                                 |
| <input type="checkbox"/> _____  | <input type="checkbox"/> Exp. Mail No. _____   |



## **EXHIBIT B**



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of:

John SANTHOFF

Serial No.: 10/820,328

Filed: April 7, 2004

For: Ultra-Wideband  
Communication Through a Wire  
Network

Group Art Unit: 2611

Examiner: Curtis B Odom

Confirmation No.: 8509

Carlsbad, California  
November 16, 2006

MAIL STOP AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO OFFICE ACTION**

Dear Sir:

In response to the Office Action mailed May 18, 2007, the following amendments and remarks are submitted for the Examiner's consideration. Applicant notes that the deadline for filing a response to the Office Action has been extended by the enclosed Petition for Extension of the Office Action until November 18, 2007

## CLAIMS

Claim 1 (canceled).

2. (currently amended) The ultra-wideband communication system of claim 2 [[1]], wherein the ultra-wideband signal comprises an impulse radio signal.

3. (currently amended) The ultra-wideband communication system of claim 2 [[1]], wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds.

4. (currently amended) The ultra-wideband communication system of claim 2 [[1]], wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds and a power that can range between about 30 power decibels to about -90 power decibels, as measured at a single frequency.

5. (currently amended) The ultra-wideband communication system of claim 2, ~~wherein~~ the further comprising an ultra-wideband transmitter that comprises an ultra-wideband pulse modulator that is structured to transmit a multiplicity of ultra-wideband signals.

6. (currently amended) The ultra-wideband communication system of claim 9, ~~1, wherein~~  
~~the~~ further comprising an ultra-wideband receiver that comprises an ultra-wideband pulse  
demodulator that is structured to receive a multiplicity of ultra-wideband signals.

7. (currently amended) The ultra-wideband communication system of claim 9 ~~[[1]]~~,  
wherein a wire employed in the ~~wired~~ community access television network is selected  
from a group consisting of: an optical fiber ribbon, a fiber optic cable, a single mode fiber  
optic cable, a multi-mode fiber optic cable, a twisted pair wire, an unshielded twisted pair  
wire, a plenum wire, a PVC wire, a coaxial cable, and an electrically conductive material.

Claim 8 (canceled).

9. (original) A method of transmitting data through a community access television  
network, the method comprising the steps of:

providing the community access television network; and

transmitting an ultra-wideband signal through the community access television  
network.

10. (original) The method of claim 9, wherein the community access television network  
is selected from the group consisting of: an optical network, a cable television network, a  
community antenna television network, and a hybrid fiber coax television network.

11. (original) The method of claim 9, wherein the ultra-wideband signal comprises an  
impulse radio signal.

12. (original) The method of claim 9, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds.

13. (original) The method of claim 9, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds and a power that can range between about 30 power decibels to about -90 power decibels, as measured at a single frequency.

14. (original) The method of claim 9, wherein the ultra-wideband signal is used to transmit data selected from a group consisting of: telephony data, high-speed data, digital video data, digital television data, Internet communication data and audio data.

15. (original) The method of claim 9, wherein the ultra-wideband signal is transmitted substantially simultaneously with a community access television signal.

16. (original) The method of claim 9, wherein the community access television signal is used to transmit data selected from the group consisting of: telephony data, high-speed data, digital video data, digital television data, Internet communication data and audio data.

17. (original) The method of claim 9, wherein the ultra-wideband signal and a community access television network signal use a substantially common portion of an electromagnetic radiation spectrum.

18. (original) The method of claim 9, wherein the ultra-wideband signal and a community access television network signal are transmitted in a frequency band that can range from between about 100 KHz to about 3 GHz.

19. (original) The method of claim 9, wherein the ultra-wideband signal and a community access television network signal use separate portions of an electromagnetic radiation spectrum.

20. (original) The method of claim 9, wherein the ultra-wideband signal is transmitted in a frequency band that can range from between about 880 MHz to about 3 GHz and a community access television network signal is transmitted in a frequency band that can range from between about 100 KHz to about 3 GHz.

21. (original) The method of claim 9, wherein the ultra-wideband signal is transmitted in a frequency band that can range from between about 1 GHz to about 3 GHz and a community access television network signal is transmitted in a frequency band that can range from between about 1 MHz to about 900 MHz.

Claims 22-29 (canceled).

## **REMARKS**

Claims 1-29 are pending in this application. Attached hereto is a complete listing of all claims in the application, with their current status listed parenthetically. By this Response, claims 2-7 have been amended, and are presented with markings indicating their current amendments, and claims 1, 8 and 22-29 have been cancelled, without prejudice to further prosecution.

### **Terminal Disclaimer**

In paragraphs 1 and 2 of the Office Action the Examiner rejects claims 9-15 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 8-12 of U.S. patent 6,782,048. In response, Applicant submits a terminal disclaimer and the fee under 37 CFR 1.20(d).

### **1<sup>st</sup> Rejection Under 35 U.S.C. § 102**

In paragraphs 3 and 4 of the Office Action pending claims 1-8 and 22-29 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,677,927 ("Fullerton"). As discussed below, Applicant respectfully traverses this rejection.

Claims 1, 8 and 22-29 have been cancelled, thus the rejection of these claims is now moot. Dependent claims 2-7 have been amended to now depend from independent claim 9, the traverse of which is discussed below. And because claims 2-7 depend from independent claim 9 it is respectfully submitted that the rejection of these claims has been traversed by virtue of their dependency from claim 9. M.P.E.P. § 2143.03.

## 2<sup>nd</sup> Rejection Under 35 U.S.C. § 102

In paragraph 5 of the Office Action pending claims 9-10 and 15-21 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 7,013,145 (“Centore”). As discussed below, Applicant respectfully traverses this rejection.

### A. The Law of Anticipation and Enabling Prior Art References

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. M.P.E.P. § 2131. The identical invention must be shown in as complete detail as is contained in the claim. *Id.*

However, Applicant submits that claim 9 has elements that cannot be found, either expressly or inherently, in Centore. Claim 9 reads as follows:

A method of transmitting data **through** a community access television network, the method comprising the steps of:

providing the community access television network; and

transmitting an ultra-wideband signal **through** the community access television network.

In an effort to establish an unambiguous prosecution history, Applicant uses the word “through” in claim 9 to mean “within.” For example, an ultra-wideband (UWB) signal is sent “through” the community access television network, by using at least part of the community access television network infrastructure, which may include the “head-end,” or the “set-top-box,” or other components.

In contrast, Centore teaches “The concepts involved in the present invention relate to techniques for mitigating interference between **wireless mobile communications** and concurrent operations of broadcast television services on the same or adjacent frequency bands and, more particularly, to **controlling mobile communications equipment** according to a broadcast television signal” (Field of the Invention). This is accomplished by using “existing components

of the video signal, as transmitted, as timing references for keying the transmission and/or reception of concurrent users (*i.e.*, wireless mobile devices) on and off and/or for power- and sensitivity-control decisions” (4:60-63). Put differently, Centore teaches controlling the transmission time, power or sensitivity of cell phones or other wireless devices to avoid interference with “concurrent operations of broadcast television services.”

**Centore does not teach using at least part of a community access television network to also carry ultra-wideband signals, as recited in Applicant’s independent claim 9.** Instead, he teaches **mitigating interference between two independent infrastructures**, as illustrated in FIG. 3: a wireless mobile communications infrastructure (concurrent RF spectrum user 21); and a broadcast television infrastructure (television broadcast transmitter and antenna 11).

Accordingly, Applicant respectfully submits that Centore cannot anticipate originally filed claims 9-10 and 15-21.

### **Rejection Under 35 U.S.C. § 103**

In paragraphs 6 and 7 of the Office Action, claims 11-14 stand rejected as unpatentable under 35 U.S.C. § 103(a) over Centore in view of Fullerton.

Claims 11-14 depend from and further limit independent claim 9, which has been distinguished from Centore above. In view of the above discussion, Applicant respectfully submits that the Section 103 rejection of dependent claims 11-14 has been traversed because they depend from claim 9. M.P.E.P. § 2143.03.



### Conclusion


Applicant believes that this Response has addressed all items in the Office Action and now places the application in condition for allowance. Accordingly, favorable reconsideration and allowance of claims 2-7 and 9-21 at an early date is solicited. Enclosed with this response is the fee for a Petition for a three-month extension of time, and the terminal disclaimer. Should any issues remain unresolved, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

November 16, 2007

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Date



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